

WHAT IS CLAIMED IS:

1. A detachable keypad comprising:
an earphone-microphone jack;
5 a key array; and
a DTMF (Dual Tone Multi-Frequency) generator,
wherein when a key is pressed while an earphone plug is inserted into the
earphone-microphone jack, a DTMF signal is generated by the DTMF generator
corresponding to the pressed key and is transmitted to a microphone of a mobile
10 phone through an earphone-microphone speaker.

2. A mobile phone comprising:
a microphone;
an earphone-microphone speaker fixing portion for fixing an earphone-
15 microphone speaker at a position enabling the microphone to receive sound from
the earphone-microphone speaker;
an audio/DTMF (Dual Tone Multi-Frequency) separator for separating a
signal received at the microphone into an audio signal and a DTMF signal; and
a controller for analyzing the DTMF signal and performing an
20 operation according to the analyzed DTMF signal.

3. The mobile phone of claim 2, further comprising a display,
wherein the controller analyzes the DTMF signal and if the DTMF signal
represents a digit or a character, the controller controls the display to display the
25 digit or character.

4. The mobile phone of claim 2, wherein the earphone-microphone
speaker fixing portion is a magnet.

30 5. A detachable keypad comprising:

an earphone-microphone jack;
an earphone-microphone sensor for checking whether an earphone-microphone plug is inserted into the earphone-microphone jack;
a key array;
5 a key press sensor for sensing the pressing of each key of the key array;
a DTMF (Dual Tone Multi-Frequency) generator for generating a DTMF signal; and
a controller for controlling the DTMF generator to generate a DTMF signal corresponding to a pressed key if pressing of the key is sensed while the
10 earphone-microphone plug is inserted into the earphone-microphone jack and transmitting the DTMF signal to an earphone-microphone speaker through the earphone-microphone jack and plug.

6. The detachable keypad of claim 5, further comprising:
15 a key volume control signal generator for generating a key volume control signal if the key press sensor senses input of a key volume control key; and
an amplifier for amplifying the DTMF signal received from the DTMF generator by a predetermined level in response to the key volume control signal.

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7. A mobile phone with a detachable keypad comprising:
a microphone;
an earphone-microphone speaker fixing portion for fixing an earphone-microphone speaker at a position enabling the microphone to receive sound from
25 the earphone-microphone speaker;
an audio/DTMF (Dual Tone Multi-Frequency) separator for separating a signal received at the microphone into an audio signal and a DTMF signal; and
a controller for analyzing the DTMF signal and performing an operation according to the analyzed DTMF signal;
30 wherein the detachable keypad comprises an earphone-microphone jack,

a key array, and a DTMF (Dual Tone Multi-Frequency) generator, wherein when a key is pressed while an earphone plug is inserted into the earphone-microphone jack, a DTMF signal is generated by the DTMF generator corresponding to the pressed key and is transmitted to the microphone of a mobile phone through the 5 earphone-microphone speaker